ISSN: 2735-9093



Volume 4, No. 4 Special Edition, 2022

A Publication of the Faculty of Management Sciences Federal University Dutsin-Ma Katsina State

A Publication of the Faculty Management Sciences Federal University Dutsin-Ma Katsina State

#### **EDITOR IN CHIEF**

Prof. Abdulkarim Garba

#### MANAGING EDITOR

Asso, Prof. Suleiman Abubakar Sadiq

#### ASSOCIATE EDITORS

Asso. Prof. Olaoye Ismail

Dr. Idris A. Adamu

Dr. Ahmed Abubakar

Dr Nuhu J. Shagari

Dr. Munir S. Mashi

Dr. Abdulrahman Abdulrazak

Dr. Mohammed A. Yusuf

Dr. Abu Oseini

#### EDITORIAL ADVISORY BOARD

Prof. Emmanuel A. Kighir

Prof. Aliyu Mamman

Prof. Aminu Kado Kurfi

Prof. Joshua Okpanachi

Prof. Abdu Jafar Bambale

Prof. Abdulsalam Dauda

Prof. Saheed Zakari

Prof. Oladejo Lukman Gbolagade

Prof. Aminu Hassan

Asso, Prof. Isa A Adamu

Asso. Prof. Yusuf Hashim

#### CONTENTS

Corporate Governance and Effectiveness in Guaranty Trust Bank Plc., Lagos Branches, Nigeria OYALAKUN, Daniel Oluwaseun*, WOKOMA, Tamuno-Inam Nicholas SOLAJA, Oluwasegun Abraham, ADEFISAN, Kazeem Adesola	1
Does Effective Internal Control System affect Performance of Nigerian Microfinance Banks? ADEMOLA, Abimbola Oluwaseyi Ph.D, FCA	12
Impact Of Capital Structure On The Financial Performance Of Selected/Quoted Cement Manufacturing Companies In Nigeria Balarabe Abubakar <sup>1</sup> and Isah Alhaji Lawal <sup>2</sup>	25
Impact of Remittances on Financial Development in West African Countries KOLAWOLE, Kayode David (Ph.D) <sup>1</sup> , BABAITA, Kolawole Alabi (Ph.D) <sup>2</sup> , BUSARI, Romoke Rafiat (Ph.D) <sup>3</sup> , ABDULMUMINI, Maryam Jumai <sup>4</sup>	37
Is Open Market Operation an Effective Instrument of Monetary Policy Management in Nigeria?  Stanley C. Udegbule	47
Performance and Risk-Return Characteristics of Residential Property Capital Returns in Nigeria. Case Study of Kano Metropolis Salihu N. <sup>1</sup> , Nuhu M. Bashar <sup>2</sup> , Sanni M. Lekan <sup>3</sup> and Sule I. Abbas <sup>2</sup>	57
Impact Of Proactiveness on Sales Growth of Small and Medium Enterprises (SMEs) In Nigeria <sup>1</sup> Ibrahim Maikudi Kankia, <sup>2</sup> Hadiza S. Abubakar PhD & <sup>3</sup> Prof. Zainab Dabo	69
Financial Technology and the Supply Side of Financial Inclusion in sub-Sahara Africa Countries.  *Samson Ogege**Ajibola Arewa (correspondent) *** Ojo-Agbodu Ayodele Abraha, ****Omowunmi Aminat Amusan ***** Ejianya Emmanuel Cand****** Owoola-Adebayo Soyingbe Folasade	87
Nigeria Pattern of Migration: Issues on Human Sustainable Development OMOROGHOMWAN, Blessing Osayemwenre Ph.D, CHRIS-OBADIGIE, Olayemi Omolola	101
Strategic Cost Management Practices and Customer Value Enhancement In Selected Quoted Manufacturing Firms in Lagos and Ogun States, Nigeria ADIGBOLE Ezekiel A. (Ph.d.)***, FAGBEMI Temitope O. (Ph.d)*, ABOGUN Segun (Ph.d)*and Alabi Jacob A. (Ph. d.)**	123

Moderating Role of Technological Orientation on the Relationship between Entrepreneurial, Orientation Learning Orientation on SMEs Innovation Performance: A Proposed Model Shamsudeen MuazuSalisu, Kabiru Tsoho, Adamu Baba Jajere, Abubakar Tijjani Usamat	139
Effects of Covid-19 Pandemic on Performance of Small Business of Kwara State, Nigeria Ibrahim Bamidele Hamzat	148
The Effects of Child Abuse and Neglect in the Society  Baduku Silas Anthonia, Ummulkhairi Mohammed	157
Intellectual Capital and Financial Performance of Listed Deposit Money Banks in Nigeria Usman Sani Kofar Wambai <sup>1</sup> , Ibrahim Abubakar, Ayuba <sup>2</sup> , Abubakar Ahmed <sup>3</sup> , Khalid Haladu Bello <sup>3</sup>	165
Microfinance Bank Services and Profitability of Small and Medium Scale Enterprises: The North-Central Nigeria Experience YAHAYA Abdulrazak Akanni and AGBOOLA Luqman Wole	177
The Moderating Role of Risk Management Committee Size on the Relationship Between Non-Performing Loans and Financial Performance of Deposit Money Banks in Nigeria  1 Yusuf Ahmed Tijjani, 2 Idris Ahmed PhD & Mohammed Zubairu PhD	187
Effect of Environmental Factors on Small and Medium Scale Enterprises Performance in Abeokuta South, Ogun State, Nigeria Ajagbe, F. A., Olaifa, O. I., Abiodun, J. A	204
Regulatory Interventions towards Development of Electronic Banking in Nigeria: A viewpoint  Ismaila Yusuf	213
Critical Success Factors: A Tool Formonitoring Small Medium Enterprises Performance During Covid-19 Pandemicinogun State, Nigeria OYALAKUN, Daniel Oluwaseun(Ph.D candidate, ACA), OGUNWEDE, Joseph Kayode (Ph.D, FCA), WOKOMA, Tamuno-Inam Nicholas (Ph.D, FCA) AJAO, John Sunday	222
Life Cycle Assessment and Financial Worthiness of Solar Photovoltaic Electricity Generation in Nigeria * Ajibola Arewa (correspondent) ** Samson Ogege *** Ojo-Agbodu Ayodele Abraha, ****Ejianya Emmanuel Cand *****Owoola-Adebayo Soyinghe Folasade	136

v

Board Characteristics And Corporate Social Responsibility Disclosure In Nigerian Non-Financial Sector: The Moderating Effect Of Firm's Performance Shamsuddeen Yusuf Bugaje, a1. Jamilu Salisu Ahmad, b2, Aliyu Sani Shawai, c3	246
Moderating Effect of Ownership Structure on Social Sustainability Disclosure and Value among Nigerian Listed Manufacturing Firms  Teryima Samuel Orshi <sup>1</sup> , Ibrahim Magaji Barde <sup>2</sup> , Muhammad Liman Muhammad <sup>3</sup>	261
Effects of Enterprise Creativity on Business Competitiveness of Confectionery Businesses in Ogun State, Nigeria Akinbola, Olufemi Amos, Kowo Solomon Akpoviroro, Sanni, Sekinat Arike, Akinbola, Omolola Sariat	283
Digital Initiatives Value Addition: A Scale Development and Validation  Abubakar Ado Adamu <sup>1</sup> , Nasiru Abdullahi <sup>2</sup> , Salisu Umar <sup>3</sup> and  Abdullahi Hassan Gorondutse <sup>4</sup>	299
ssues and Challenges of Financial Inclusion among Women Entrepreneurs in Nigeria  ADEMOLA, Abimbola O., <sup>2</sup> LAWAL, Nureni A., <sup>3</sup> AFOLABI, David O. and MORAKINYO, Ayodele D.	319

#### IMPACT OF REMITTANCES ON FINANCIAL DEVELOPMENT IN WEST AFRICAN COUNTRIES

#### KOLAWOLE, Kayode David (Ph.D)1

Department of Finance, University of Ilorin, Nigeria kolawole.kd@unilorin.edu.ng

#### BABAITA, Kolawole Alabi (Ph.D)2

Department of Banking and Finance, Kwara State Polytechnic, Ilorin babaitakolaphd@gmail.com

#### BUSARI, Romoke Rafiat (Ph.D)3

Department of Management and Accounting, Obafemi Awolowo University, Nigeria romokeb@yahoo.com

#### ABDULMUMINI, Maryam Jumai<sup>4</sup>

Department of Liberal Studies, Kwara State Polytechnic, Ilorin abdulmuminimaryamjumai@gmail.com

#### ABSTRACT

The aim of this study is to examine the impact of international remittances on financial development in West African countries. In order to achieve the research objectives, secondary data was collected from World Bank Indicator from 1990 to 2020. Balanced panel data analysis was employed in the study. A model was adopted in the study and from the analysis, the study revealed that international remittances inflow is a significant determinant of financial development in West African countries at 1% level of significance level. It was further revealed that trade openness has positive relationship with financial development in West African countries. Finally, the findings also revealed that there exists a negative relationship between international remittances and financial development in West African countries at 1% significant level. The study concluded that international remittances are significant determinant of financial development in West African countries. Therefore, the study recommends that enabling environment should be provided by regulators of financial institutions which will open the economy to international trade and also attracts international remittances in order to improve the financial institutions in West African countries.

#### INTRODUCTION

Remittances serve as a significant source of savings and capital for investment and entrepreneurship, resulting in increased productivity and employment, which leads to economic advancement in a country. Remittances, which account for roughly 27% of GDP in emerging countries, have recently become one of the most important sources of international capital inflows (World Bank, 2020). The huge growth in the volume of remittances to poor countries can be linked to improved immigration between developed and developing countries, as well as technical advancements that have facilitated low-cost international financial transfers between individuals (Meyer & Shera, 2017). Despite the tremendous benefits of remittances to developing countries' performance, the influence of remittances on financial growth remains unclear (Kumar,

Stauvermann, Patel, & Prasad, 2018). While some studies (such as Meyer and Shera, 2017 and Kumar et al., 2018) found a positive association between remittances and financial development, others found a negative or zero relationship between remittances and financial growth (Lim & Simmons, 2015). It is impossible to overstate the importance of a strong financial sector to simmons, 2015). It is impossible to overstate the importance growth-inducing industries economic efficiency and the transfer of remittances to more modern growth-inducing industries. Financial development enhances economic growth and strengthens a country's resilience, Financial development, according to Sahay, Čihák, N'Diaye, Barajas, Bi, Ayala, Gao, Kyobe, Nguyen, Saborowski, Svirydzenka, and Yousefi (2015), mobilizes savings, encourages information sharing, improves resource allocation, and allows for risk diversification and management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management. In the same way, deep and liquid financial systems help to minimize the impact of management.

Financial system improves resource allocation efficiency and, as a result, it improves a country's absorptive ability for international remittance inflows. A highly developed financial system, in particular, may aid the technology diffusion process linked with international remittances. However, remittances in West African countries, have a high cost of sending, in addition to other costs such as check cashing, conversion fees, and charges on international money transfers, which limits the amount they send back to their home countries. The cost of sending money to African countries from overseas is about twice as much as it is to send money to any other part of the world (World Bank, 2020). While it costs an average of 8.5 percent to send for example, \$200 to SSA in 2020, it cost an average of 5 percent to send same amount to South Asia and the Middle East and North Africa respectively. A report by the Overseas Development Institute (ODI) estimated a mid-range annual loss of US \$1.8 billion as a result of high remittance costs through the formal channels in Africa (Watkins & Quattri, 2014).

Again, according to Orozco (2004), the cost of receiving remittances in rural areas is substantially higher due to the long distances people must go to collect their funds. Recipients are frequently charged handling fees or face unfavorable exchange rates when collecting funds. Similarly, households in Africa's rural sector got far fewer remittances from Asia than their urban counterparts. More telling is the fact that just 30 to 40% of all remittances go to rural areas (Africa-Focus, 2010), despite the fact that the majority of the population lives in cities. The gap in remittance distribution amongst household highlighted the need for financial institutions to expand their presence in rural areas so as to help in distributions of these remittances. Yet, about 60% of the adult population of African countries remained unbanked with reduction in the usage of banks products and services thereby limiting their easy access to international remittances (EFINA (2018) and relying on risky and expensive informal ways of channeling international remittances.

Data on remittance is imperfect, and thus understates the total volume of remittances in Africa Many poor countries, on the one hand, do not include remittance statistics in their balance of payments. Remittances are frequently transmitted through informal channels such as friends and

relatives because fees for sending money (for example, those charged by banking institutions or established money transfer companies) are relatively costly. Furthermore, because remittances are rarely consistent in size, receivers may need to obtain financial instruments that enable these monies to be safely maintained in bank deposits, even if the majority of these payments were not handled through the institutions where they are placed. The financial institutions of Sub-Sahara African countries are still affected with cases of poor performance of loans and advances (Kolawole, 2020). Interest rates charged by financial institutions have been excessively high and it has impaired the efforts of financial regulators in improving the financial accessibility in Sub-Saharan Africa. A significant proportion of credit transactions in SSA still take place in the informal markets, despite governments efforts aimed at channeling credit to the productive sector through the commercial banks (Nnanna, 2014). According to Evans (2015), banking services are available to about fifty percent of the population and more than sixty percent of the poor do not have access to formal finance and are forced to rely on a narrow range of some risky and expensive informal services which constraints their ability to participate fully in markets to increase their income and contribute to economic growth (Soludo, 2008).

Though, the studies on remittances and financial development in single country analysis is not new (such as Kakhkharov 2014); Matuzeviciute and Butkus (2016); and Yilmaz and Sezgin (2020)); however, extant literature on the role of remittances-financial sector development on cross country investigation such as West African countries is sparse. It is believed that the outcome of this study will unravel the intricate relationship between remittances and financial sector development in West Africa; chatting the way forward for policymakers in West Africa and other parts of the World.

#### LITERATURE REVIEW

Kakhkharov (2014) examined the impact of remittances on financial development of Central, Eastern Europe and former Soviet Union. The variables used are ratio of private credit to GDP, inflation and remittances. Using fixed effects panel data analysistechniques, the study revealed that remittances have a strong and positive impact on various measures of financial development.

Matuzeviciute and Butkus (2016) examined the impact of remittances on long-run economic growth. Using an unbalanced panel data covering a sample of 116 countries with different development levels over the period 1990–2014, the studied the interaction between remittances and the level of economic development, as well as its impact on long-run economic growth—because the impact of remittances could be influenced by the development level of the receiving countries. In parallel, we explored the hypothesis about diminishing a country's capacity to use remittances for promoting long-run economic growth as the abundance of remittances increases. To control the endogeneity while estimating the impact of remittances on long-run economic growth, the study used OLS (ordinary least squares) with FD (first differences) transformation and FE (fixed effects) approaches and other controls of long-run growth. The results showed that in general remittances have a positive impact on long-run economic growth, but the impact differs based on the country's economic development level and the abundance of remittances in the economy.

Mubeen, Nazam, Batool, Akram and Ishtiaq (2016) examined the impact of remittances on financial development of Pakistan. The study considered economic growth as the dependent variable. For independent variables worker's remittances, foreign direct investment, inflation, and exchange rate and agriculture growth. The multiple regression investigation was employed to exchange rate and agriculture growth. The multiple regression investigation was employed to exchange rate and agriculture growth. The multiple regression investigation was employed to examine the relationship between the dependent and independent variables. The study revealed examine the relationship between the dependent and major relation with GDP of Pakistan at the same time that overseas remittances have positive and major relation with GDP of or pakistan at the same time that overseas remittances have positive and major relation economic growth.

Nguyen, Cuong and Linh (2017) examined the pattern and the impact of migration and remittances on household welfare in Vietnam using fixed-effects regressions and panel data from Vietnam using fixed-effects regressions and panel data from Vietnam Household welfare in Vietnam using fixed-effects regressions and panel data from Vietnam Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012. Overall, the effect of migration as well as Household Living Standard Surveys 2010 and 2012.

Abosedra and Fakih (2017) examined the relationship between remittances, financial deepening and the growth of the Lebanese economy using quarterly data from 1993 to 2011. Using Vector Error Correction Model (VECM), the results provide strong support for the theoretical contention that remittances and financial development share a robust long-run relationship with growth in Lebanon. However, the results indicate that short-run effects on growth volatility are statistically insignificant from financial development but strongly significant from remittances. These results extend recent findings on the financial development, remittances and growth nexus and imply that benefits expected from remittances for addressing growth volatility in Lebanon materialize more than those associated with financial development.

Bhattacharya, Inekwe and Paramati (2018) examined the role of incoming remittances on financial development for 57 highest remittance recipient economies. A long run equilibrium relationship is established between remittances and three alternative indicators of financial development. Estimates from the dynamic system-generalized method of moments reflect lower elasticity values for developing countries compared to the developed ones. Our findings are robust across countries, and highlight the necessity for strengthening institutional set-ups to increase the inflow of remittances, which will enhance financial development across countries.

Issahaku (2019) investigatedhow remittances and monetary policy independently and interactively shape the financial system of developing countries. It employs single equation instrumental variable based estimation procedures to test the hypothesis that, to boost financial development, remittances require a complementary domestic monetary policy framework which ensures price stability while limiting price distortions. The results show that remittances stimulate financial development only in countries with a favourable monetary environment. Building on these results and employing various indicators of financial development, the results suggest that remittances rise to cushion migrant households from the repercussions of poor financial intermediation, weak institutions and unfavourable business environment in the home country.

Bandura, Zivanomoyo and Tsaurai (2019) evaluated the association of remittances inflow with financial development and economic growth in Southern African Development Community (SADC). A sample period between 2006 and 2016 on 14 countries in the region was considered with the utilization of GMM dynamic panel techniques. The findings present evidence of a positive impact of remittances on economic growth, while a negative association between remittances and financial development is also found. The results are unique since many previous studies established a positive relationship between remittances and financial development. The negative relationship between remittances and financial development in SADC implies investment is mainly financed through remittances inflow since access to bank financing is very difficult.

Peprah, Ofori and Asomani (2019) examined financial development, remittances and economic growth. The study uses macro data to examine the linkages between financial development, remittances and economic growth in Ghana. It estimate a dynamic heterogeneous Autoregressive Distributed Lag (ARDL) model to show that financial booms are not, in general, growthenhancing, and a certain level of financial development can drag down economic growth in the long term and the combined effect of financial development and remittances should be of concern to policymakers.

Naceur, Chami and Trabelsi (2020) examined the relationship between remittances and financial inclusion for a sample of 187 countries over the period 2004-2015, using cross-country as well as dynamic panel GMM regressions. At low levels of remittances-to-GDP, these flows act as a substitute to formal financial channels, thereby reducing financial inclusion. In contrast, when remittance-to-GDP ratio is high, above 13% on average, they tend to complement formal access and usage channels, thus enhancing financial inclusion.

Yilmaz and Sezgin (2020) carried out study on the impact of the remittances on the development of financial sector in Central and Eastern European countries during the 1996-2015 period employing LM bootstrap cointegration test of Westerlund and Edgerton (2007) and causality test of Dumitrescu and Hurlin (2012). The findings suggested that there was cointegrating relationship among remittances, trade openness and financial sector development. Furthermore, there was unidirectional causality from financial development to remittances.

#### RESEARCH GAPS

Though, the studies on remittances and financial development in single country analysis is not new (such as Kakhkharov 2014); Matuzeviciute and Butkus (2016); and Yilmaz and Sezgin (2020)); however, extant literature on the role of remittances-financial sector development on cross country investigation such as West African countries is sparse. It is believed that the outcome of this study will unravel the intricate relationship between remittances and financial sector development in West Africa; chatting the way forward for policymakers in West Africa and other parts of the World.

Furthermore, the previous studies focused on credit to private sector as a measure of financial depth neglecting interest rates that influences the level of this credit taken by private sector, therefore creating lacuna in looking at financial depth as a measure of financial development.

### METHODOLOGY

THEORETICAL FRAMEWORK

The theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of this study follows Mckinnon-Shaw (1973) hypothesis adopted to the theoretical framework of the theore The theoretical framework of this study follows in the control of the study follows in the control of this study follows in the control of the control of this study follows in the control of the contro Chin and Ito (2005); Huang (2006); and Seetanan et al. (2006) and Seetanan case of financial repression negatively affects manifeld become while others calls the interest rate the reward for a saver's abstinence from consumption. The classical account of the present consumption of the classical account of the present consumption. the interest rate the reward for a saver's abstinence from the present consumption. The classical economic it a charge for the borrower's preference for the present rate does not depend in appropriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depend in a propriate the interest rate does not depen it a charge for the borrower's preference for the present each does not depend in any way to called this a real theory of interest. This is because the interest rate does not depend in any way to monetary conditions.

MODEL SPECIFICATION

From the above theoretical framework, the study presents the econometric model of finance while this study will incorporate the From the above theoretical framework, the study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will incorporate the remittance development in Sub-Sahara African countries while this study will be sub-Sahara African countries the sub-Sahara African countries while the sub-Sahara countries while the sub-Sahara countries development in Sub-Sahara Atrican countries white the objective one of this study which is wariables in financial development model. To address both objective one of this study which is the variables in financial development model. variables in financial development model. To dead depth in West African countries, the ascertain the effect of international remittances on financial depth in West African countries, the following model is specified:

FD = f(REM, OPEN, INCPC, INF, INTR). Econometrically equation 1 is expressed as: Econometrically equation  $P(t) = \beta_0 + \beta_1 REM_{it} + \beta_2 OPEN_{it} + \beta_3 INCPC_{it} + \beta_4 INF_{it} + \beta_5 INTR_{it} + \epsilon_{it}$ where FD is financial depth (Proxy with Credits to private enterprises), REM

Remittances received in West Africa countries, OPEN is trade openness (which is the sum of import and export as a ratio of GDP following the works of Nwodo and Asogwa (2018)), INCPL is per capita income, INF is inflation, INTR is interest rate and RR is reserve requirement. The data used for this research work is secondary data which was sourced from the World Development Indicator covering the period of 1990 to 2019. To achieve the objectives, panel data regression was used to analyze the data obtained. The selected countries in West Africa are Benin, Burking Faso, Cote d'ivoire, Ghana, Guinea Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Siem Leone and Togo.

### DATA PRESENTATION AND RESULT ANALYSIS

Table 4.1: Correlation Coefficients

able 4.1: Cor	FD	Remittances	Openness	LogGDP	Iinflation	Iinterest
FD	1.000					
Remittances	0.3687	1.0000				
Openness	0.1474	0.1830	1.0000			
LogGDP	0.3312	0.2041	0.1433	1.0000		
Inflation	-0.2534	-0.1715	0.0501	0.1018	1.0000	
Interest	-0.1124	-0.1149	0.2159	0.0965	0.2628	1.0000

Source: Author's Computation (2022)

The existence of multicollinearity is a problem that invalidates the estimates of regression estimators. To assess this, a pair-wise correlation was conducted. This shows the nature of relationship between each pair of the variables used. The result of the correlation is presented in Table 4.1. It shows that inflation and interest rate have negative correlation coefficients (negative relationship) with financial development. More so, inflation and interest rate also have negative relationship with remittances while all other variables are positively correlated. However, the correlation coefficient is less than 0.5 for all the variables. The rule of thumb is that, when the value of correlation efficient is greater than 0.8 then there is the problem of multicollinearity otherwise there is no problem of multicollinearity.

Table 4.2: Result of Random Effect Models for Financial Development

Dependent Variable: Financial Development  Variable: Financial Development				
Variable	Coef.	Std. Err.	Z.	P-Value
Remittance	.6094298	.1538544	3.96	0.000
Openness	.106448	.0227099	4.69	0.000
LogGDP	4.886598	.70282	6.95	0.000
Inflation	1560213	.0279459	-5.58	0.000
Interest	2650527	.0538931	-4.92	0.000
cons	-40.00053	.7.211862	-5.55	0.000
	Observation		372	0.000
•	Number of CID	12	2,2	

Source: Author's Computation (2022)

Table 4.2 shows the model used to investigate the impact of remittances on financial development in West African states. Financial development (FD) is the model's dependent variable. The independent variables include remittances, openness, log of GDP, inflation and interest rates. The results of the random effect model FD is positively related to remittances, openness and log of GDP. That is, when the remittances, openness and Gross Domestic Product increased, the financial development in West African states rises vice versa while inflation and interest rates were inversely related to financial development. Therefore, as the inflation and interest rates rises, the financial development of West African countries tends to reduce and vice versa.

Furthermore, the coefficients of remittances, openness, log of GDP, inflation and interest rates are statistically significant at 1%, in the random effect model. This means that remittances, openness, log of GDP, inflation and interest rates are all major determinants of financial development of West African countries. In other words, the remittances, openness, log of GDP, inflation and interest rates all impacted on financial development of West African countries. Averagely, FD increased by .6094298 units in the random effect model due to a percent increase in remittances into West African countries. Similarly, one percent increase in trade openness brings about 106448 units increase in FD. In addition, one percent increase in gross domestic product brings about 4.886598 units increase in FD while a percent increase in inflation and interest rates leads to .1560213 and .2650527 decreases in financial development of West African countries respectively.

Table 4.3: Test results TEST		Result of Breusch-Pagan		Hausman test	
MODEL	TLO Y	Fit- Statistics P-value	chi- Statistics	antine -	
				9.74	13.92
FD		60.79	0.0000		

Source: Author's Computation (2021)

Interpretation of Result of Breusch-Pagan Lagrange Multiplier (BP) Test

The BP test has a drawback because it assumes heteroskedasticity is a linear function of the independent variables. Table 4.3 shows the findings of BP tests, which are consistent in rejecting the null hypothesis of homoskedasticity. As a result, the statistical evidence suggests that panel data regression with fixed and random effects is the most suited technique for the models.

Interpretation of Result of Hausman Test

When both fixed and random effects models exhibit good fit, the Hausman test is used to examine and determine which model is best. The Hausman test's null hypothesis is that a random effect model is better or more consistent than a fixed effect model. Use the fixed effect model if the null hypothesis is rejected; otherwise, use the random effect model. The chi-square statistics for financial development of West African countries in the Hausman test finding provided in table 43 is 9.74, with P-values of 13.92. Because the P-value is greater than 5% level of significance, the null hypothesis is not rejected, and the result of the random effect model supersedes empirical assumptions about the relationship and impact of the independent variables in both models.

#### CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, it was concluded that remittances, trade openness, log of GDP. inflation and interest rates have significant impact on financial development of West African countries. Therefore, the study recommends that economic policies that will keep inflation and interest rates down and achieve economic growth need to be encouraged by policy makers in order to get better performance of the financial sector. Furthermore, an enabling environment should be provided by regulators of financial institutions which will open the economy to international trade and also attracts international remittances in order to improve the financial institutions in West African countries.

#### REFERENCES

Abosedra, S. & Fakih, A., (2017). Assessing the Role of Remittances and Financial Deepening in Growth: The Experience of Lebanon. Global Economy Journal, 17(1). doi: https://doi.org/10.1515/gej-2015-0059.

Adam, R. H. (2004). Remittance and Poverty in Guatemala", World Bank policy Research Working paper 3418: Washington DC: World Bank.

Adeyi, E. O. (2015). Remittances and Economic Growth: An Empirical Evidence from Nigeria and Sri Lanka, Basic Research Journal of Education Research and Review, 4(5); 91-97.